USSN: 09/645,078

II. REMARKS

Formal Matters

Claims 1, 16-20, 27-30, and 38-40 are pending after entry of the amendments set forth herein.

Claims 1, 3, and 16-38 were examined. Claims 3 and 21-38 were rejected. Claims 1 and 16-20 were allowed. Claims 4-15 were withdrawn from consideration.

Claims 27-29 and 38 are amended. The amendments to claims 27-29 and 38 were made solely in the interest of expediting prosecution, and is not to be construed as an acquiescence to any objection or rejection of any claim. Claims 27-29 and 38 are amended merely to change the claim dependency. Accordingly, no new matter is added by these amendments.

Claims 3, 4-15, 21-26, and 31-37 are canceled without prejudice to renewal, without intent to acquiesce to any rejection, and without intent to surrender any subject matter encompassed by the canceled claims. Applicants expressly reserve the right to pursue any canceled subject matter in one or more continuation and/or divisional applications.

Claims 39 and 40 are added. Support for new claims 39 and 40 is found in the claims as originally filed, and throughout the specification, including the following exemplary locations: <u>claim 39</u>: page 8, lines 23-24; and <u>claim 40</u>: page 8, lines 13-16. Accordingly, no new matter is added by these new claims.

Applicants respectfully request reconsideration of the application in view of the remarks made herein.

Rejoinder

Applicants respectfully request rejoinder of method claims to the extent that they incorporate all the limitations of an allowed claim, as provided for under MPEP §821.04.

Allowable subject matter

Applicants note with gratitude that claims 1 and 16-20 were deemed allowable. The claim dependencies of claims 27-29 and 38 are amended. Claims 27-30 and 38 now depend from an allowable claim. Accordingly, claims 27-30 and 38 should also be allowable. New claims 39 and 40 depend from an allowable claim. Accordingly, new claims 39 and 40 should also be allowable.

USSN: 09/645,078

Priority

The Office Action stated that no support for SEQ ID NO:3 or SEQ ID NO:4 is found in any of the applications to which priority is claimed, and stated that claims 21-33 and 38 are granted a priority date of August 23, 2000. However, the application as filed on March 20, 1998 provides broad support for human GST-3 as well as homologs thereof expressed in non-human species.

Preliminary Amendment

Applicants note for clarity that the Preliminary Amendment filed on September 30, 2002 was withdrawn by Applicants.

Rejection under 35 U.S.C.§112, first paragraph

Claims 3 and 31-37 were rejected under 35 U.S.C.§112, first paragraph, as allegedly containing new matter. Claim 32 was rejected under 35 U.S.C.§112, first paragraph, as allegedly lacking adequate written description.

New matter

The Office Action stated that a fragment of a nucleotide sequence with at least 75% identity to SEQ ID NO:01 which catalyzes the transfer of a sulfate group from a donor or a selectin ligand is new matter. The Office Action stated that the specification does not specifically identify a fragment of a GST-3 polypeptide known to comprise catalytic sulfate transfer activity. Applicants respectfully traverse the rejection.

Sulfotransferases catalyze the transfer of a sulfate from a donor compound to an acceptor compound. Functional domains of a sulfotransferase thus include sulfate donor and sulfate acceptor functional domains. The specification discusses an acceptor binding site, e.g., region A. Specification, page 10, lines 15-18. Region A is identified in the specification, and an amino acid sequence is given for Region A. Specification, page 44, lines 20-23. The specification also discusses a donor binding site, e.g., VRYEDL. Specification, page 10, lines 18-19. The instant application provides an amino acid sequence of a fragment that includes a VRYEDL donor binding site. See, e.g., Figure 6. Thus, the instant application provides ample written description for GST-3 fragments that catalyze the transfer of a sulfate group from a donor compound to a selectin ligand. Accordingly, claims 3 and 31-37 do not add new matter.

USSN: 09/645,078

Nevertheless, and without conceding as to the correctness of this rejection, claims 3 and 31-37 are canceled without prejudice to renewal, thereby rendering the rejection of these claims moot.

Written description

The Office Action stated that claim 32 fails to comply with the written description requirement. The Office Action stated that page 10 of the instant specification discloses that embodiments of the invention include functional domains such as an acceptor binding site, which are postulated to be the 5'most consensus region A. The Office Action stated that the specification does not disclose that any of the consensus regions disclosed are known or were found to actually bind a sulfate acceptor compound. Applicants respectfully traverse the rejection.

All that is required to meet the written description requirement of 35 U.S.C.§112, first paragraph, is that the specification convey with reasonable clarity to those skilled in the art that, as of the filing date, Applicants were in possession of the claimed invention. The Office Action has not presented sufficient evidence or reasons why a person skilled in the art would <u>not</u> recognize that the written description of the claimed invention provides support for the claims.

As discussed above, the specification discusses an acceptor binding site, e.g., region A. Specification, page 10, lines 15-18. Region A is identified in the specification, and an amino acid sequence is given for Region A. Specification, page 44, lines 20-23. Those skilled in the art, given the description in the specification, would have no reason to doubt that Applicants were in possession of the invention as recited in claim 32.

Nevertheless, and without conceding as to the correctness of this rejection, claim 32 is canceled without prejudice to renewal, thereby rendering the rejection of this claim moot.

Conclusion as to the rejections under 35 U.S.C.§ 112, first paragraph

Applicants submit that the rejection of claims 3 and 31-37 under 35 U.S.C. §112, first paragraph, has been adequately addressed in view of the remarks set forth above. The Examiner is thus respectfully requested to withdraw the rejection.

USSN: 09/645,078

Rejection under 35 U.S.C.§102(a)

Claim 21 was rejected under 35 U.S.C.§102(a) as allegedly anticipated by Tang et al. (WO

0014251; "Tang").

Without conceding as to the correctness of this rejection, claim 21 is canceled without prejudice

to renewal, thereby rendering the rejection of this claim moot.

Applicants submit that the rejection of claim 21 under 35 U.S.C. §102(a) has been adequately

addressed in view of the remarks set forth above. The Examiner is thus respectfully requested to

withdraw the rejection.

Rejection under 35 U.S.C.§102(b)

Claims 21-24, 26, 28-30, and 38 were rejected under 35 U.S.C.§102(b) as allegedly anticipated

by Hiroaka et al. ((1999) Immunity 11:79-89; "Hiroaka"). Claims 21-30 and 38 were rejected under 35

U.S.C.§102(b) as allegedly anticipated by Bistrup et al. ((1999) J. Cell Biol. 145:899-910; "Bistrup").

Without conceding as to the correctness of these rejections, claims 21-26 are canceled without

prejudice to renewal, thereby rendering the rejection of these claims moot.

Claims 27-29 are amended to depend from claim 20, which has been deemed allowable.

Accordingly, claims 27-29 should also be allowable. Claim 30 depends from claim 29 and should

therefore also be allowable. Claim 38 is amended to depend from claim 16, which has been deemed

allowable. Accordingly, claim 38 should also be allowable.

Applicants submit that the rejection of claims 21-30 and 38 under 35 U.S.C. §102(b) has been

adequately addressed in view of the remarks set forth above. The Examiner is thus respectfully

requested to withdraw the rejection.

7

Atty Dkt. No.: UCAL107CIP2 USSN: 09/645,078

III. CONCLUSION

Applicants submit that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

The Commissioner is hereby authorized to charge any underpayment of fees associated with this communication, including any necessary fees for extensions of time, or credit any overpayment to Deposit Account No. 50-0815, order number UCAL107CIP2.

By:

Respectfully submitted, BOZICEVIC, FIELD & FRANCIS LLP

Date: Fcb. 24, 2004

Paula A. Borden

Registration No. 42,344

BOZICEVIC, FIELD & FRANCIS LLP 200 Middlefield Road, Suite 200 Menlo Park, CA 94025

Telephone: (650) 327-3400 Facsimile: (650) 327-3231

F:\DOCUMENT\UCAL\107cip2\resp final OA v2.doc